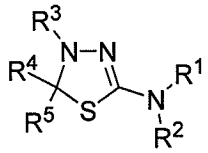
AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of a thiadiazoline derivative represented by the general formula (I) or a pharmacologically acceptable salt thereof: ~~A mitotic kinesin Eg5 inhibitor which comprises a thiadiazoline derivative represented by the general formula (I) or a pharmacologically acceptable salt thereof as an active ingredient:~~



(I)

~~<~~wherein:

R^1 represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

or a substituted or unsubstituted heterocyclic group;

R^2 represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, ~~or~~

a substituted or unsubstituted heterocyclic group,

$-C(=W)R^6$, [wherein W represents an oxygen atom or a sulfur atom, and R^6 represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group,

$-NR^7R^8$, (wherein R^7 and R^8 are the same or different and each represents a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic

group,

or R^7 and R^8 are combined together with the adjacent nitrogen

atom to form a substituted or unsubstituted heterocyclic

group),

$-OR^9$, (wherein R^9 represents a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group), or

$-SR^{10}$, (wherein R^{10} has the same meaning as that of the aforementioned

R^9)],

$-NR^{11}R^{12}$, [wherein R^{11} and R^{12} are the same or different and each represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group,

$-C(=O)R^{13}$, [wherein R^{13} represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group,

$-NR^{14}R^{15}$, (wherein R^{14} and R^{15} are the same or different and each represents a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group, or

R^{14} and R^{15} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

$-OR^{16}$, (wherein R^{16} has the same meaning as that of the aforementioned R^9), or

$-SR^{17}$, (wherein R^{17} has the same meaning as that of the aforementioned R^9)], or

R^{11} and R^{12} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group~~}~~, or

$-SO_2R^{18}$, ~~(~~wherein R^{18} represents

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group~~)~~, or

R^1 and R^2 are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

R^3 represents

a hydrogen atom, or

$-C(=Z)R^{19}$, ~~{~~wherein Z represents an oxygen atom or a sulfur atom, and R^{19} represents a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group, or

$-NR^{20}R^{21}$, ~~(~~wherein R^{20} and R^{21} are the same or different and each represents a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group, or

R^{20} and R^{21} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

$-OR^{22}$ (wherein R^{22} represents

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group), or

$-SR^{23}$, (wherein R^{23} has the same meaning as that of the aforementioned R^{22})],

R^4 represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group, and

R^5 represents

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group, or

R^4 and R^5 are combined together to represent $-(CR^{25A}R^{25B})_{m1}Q(CR^{25C}R^{25D})_{m2}-$,

{wherein

Q represents a single bond, or

a substituted or unsubstituted phenylene or cycloalkylene,

m1 and m2 are the same or different and each represents an integer of from 0 to 4, with the proviso that m1 and m2 are not 0 at the same time,

R^{25A}, R^{25B}, R^{25C} and R^{25D} are the same or different and each represents

a hydrogen atom,

a halogen,

a substituted or unsubstituted lower alkyl,

$-OR^{26}$, {wherein R^{26} represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group,

$-CONR^{27}R^{28}$, (wherein R^{27} and R^{28} are the same or different and each represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group, or

R^{27} and R^{28} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group),

$-SO_2NR^{29}R^{30}$, (wherein R^{29} and R^{30} have the same meanings as those of the aforementioned R^{27} and R^{28}, respectively), or

$-COR^{31}$, (wherein R^{31} represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group)},

$-NR^{32}R^{33}$, {wherein R^{32} and R^{33} are the same or different and each represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group,

$-COR^{34}$, (wherein R^{34} represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl,

a substituted or unsubstituted heterocyclic group,

a substituted or unsubstituted lower alkoxy,

a substituted or unsubstituted aryloxy, amino,

a substituted or unsubstituted lower alkylamino,

a substituted or unsubstituted di-(lower alkyl)amino,

or a substituted or unsubstituted arylamino), or

$-SO_2R^{35}$, (wherein R^{35} represents

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group)], or $-COOR^{36}$, (wherein R^{36} represents

a hydrogen atom,

a substituted or unsubstituted lower alkyl,

a substituted or unsubstituted lower alkenyl,

a substituted or unsubstituted lower alkynyl,

a substituted or unsubstituted cycloalkyl,

a substituted or unsubstituted aryl, or

a substituted or unsubstituted heterocyclic group), or

R^{25A} and R^{25B}, or R^{25C} and R^{25D} are combined together to represent

an oxygen atom, and

when m1 or m2 is an integer of 2 or above, any of R^{25A}, R^{25B}, R^{25C} and R^{25D} may be the same or different, and any two of R^{25A},

R^{25B}, R^{25C} and R^{25D} which are bound to the adjacent two carbon atoms may be combined to form a bond~~}>~~.

2. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^2 is $-C(=W)R^6$, ~~(~~wherein W and R^6 have the same meanings as those mentioned above, respectively~~)~~.

3. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 2, wherein R^6 is a substituted or unsubstituted lower alkyl.

4. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^3 is $-C(=Z)R^{19}$, ~~(~~wherein Z and R^{19} have the same meanings as those mentioned above, respectively~~)~~.

5. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 4, wherein R^{19} is a substituted or unsubstituted lower alkyl.

6. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^5 is a substituted or unsubstituted aryl, or a substituted or unsubstituted aromatic heterocyclic group.

7. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^5 is a substituted or unsubstituted aryl.

8. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^4 is a substituted or unsubstituted lower alkyl, or $-(CH_2)_nNHSO_2R^{24}$, ~~(~~wherein n represents 1 or 2, and R^{24} represents a substituted or unsubstituted lower alkyl, a substituted or unsubstituted lower alkenyl, an amino, a lower alkylamino, or a di-(lower alkyl)amino~~)~~.

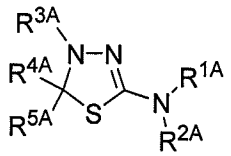
9. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^4 and R^5 are combined together to represent $-(CR^{25A}R^{25B})_{m1}Q(CR^{25C}R^{25D})_{m2}-$, ~~(~~wherein R^{25A}, R^{25B}, R^{25C}, R^{25D}, m1, m2, and Q have the same meanings as those mentioned above, respectively~~)~~.

10. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 9, wherein Q is a substituted or unsubstituted phenylene.

11. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein R^1 is a hydrogen atom.

12. (Currently Amended) The method ~~The mitotic kinesin Eg5 inhibitor~~ according to claim 1, wherein W and Z are oxygen atoms.

13. (Currently Amended) A thiadiazoline derivative represented by the general formula (IA) or a pharmacologically acceptable salt thereof:



(IA)

≤wherein R^{1A} represents a hydrogen atom,

R^{2A} represents

a hydrogen atom or

$-COR^{6A}$, ⟨wherein R^{6A} represents a substituted or unsubstituted lower alkyl⟩, or

R^{1A} and R^{2A} are combined together with the adjacent nitrogen atom to form a substituted or unsubstituted heterocyclic group,

R^{3A} represents $-COR^{19A}$, ⟨wherein R^{19A} represents a substituted or unsubstituted lower alkyl⟩,

R^{4A} represents

$-(CH_2)_pNR^{4AA}R^{4AB}$, [wherein

p represents 1 or 2, and

R^{4AA} and R^{4AB} are the same or different and each represents

a hydrogen atom,

a lower alkyl or cycloalkyl, ⟨with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} and R^{19A} are tert-butyl and R^{5A} is phenyl, R^{4AA} and R^{4AB} are not methyl at the same time⟩]],

$-(CH_2)_pNR^{4AD}COR^{4AC}$, ⟨wherein p has the same meaning as that mentioned above, R^{4AC} represents a hydrogen atom, a lower alkyl, or a lower alkoxy, and R^{4AD} represents a hydrogen atom or a lower alkyl⟩, or

$-(CH_2)_pNHSO_2R^{24A}$, ⟨wherein p has the same meaning as that mentioned above,

R^{24A} represents

$-(CH_2)_qNR^{24AA}R^{24AB}$, ~~{~~wherein q represents an integer of from 0 to 5, and R^{24AA} and R^{24AB} are the same or different and each represents a hydrogen atom, a substituted or unsubstituted lower alkyl or cycloalkyl, ~~(~~with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} is tert-butyl and R^{19A} is methyl or tert-butyl, neither of R^{24AA} and R^{24AB} is methyl, and if one of R^{24AA} and R^{24AB} is a hydrogen atom ~~in this case~~, the other is not ethyl or hydroxyethyl~~)~~~~}~~,

3-chloropropyl,

3-azidopropyl, or

lower alkenyl, ~~(~~with the proviso that when R^{2A} is $-COR^{6A}$, R^{6A} is tert-butyl and R^{19A} is methyl or tert-butyl, R^{24A} is not vinyl~~)~~~~}~~, and

R^{5A} represents a substituted or unsubstituted aryl or a substituted or unsubstituted aromatic heterocyclic group~~>~~.

14. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{5A} is substituted or unsubstituted aryl.

15. (Original) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{5A} is phenyl.

16. (Previously Presented) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{2A} is COR^{6A}, and R^{6A} is unsubstituted lower alkyl.

17. (Previously Presented) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{2A} is COR^{6A}, and R^{6A} is tert-butyl.

18. (Previously Presented) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{19A} is unsubstituted lower alkyl.

19. (Previously Presented) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{19A} is tert-butyl.

20. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{4A} is $-(CH_2)_pNR^{4AA}R^{4AB}$, (wherein p, R^{4AA} and R^{4AB} have the same meanings as those mentioned above, respectively).

21. (Currently Amended) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{4A} is $-(CH_2)_pNR^{4AD}COR^{4AC}$, (wherein p, R^{4AC} and R^{4AD} have the same meanings as those mentioned above, respectively).

22. (Previously Presented) The thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13, wherein R^{4A} is $-(CH_2)_pNHSO_2R^{24A}$, ~~(~~wherein p and R^{24A} have the same meanings as those mentioned above, respectively~~)~~.

23. (Previously Presented) A medicament which comprises the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13 as an active ingredient.

24. (Canceled)

25. (Canceled)

26. (Previously Presented) A method for inhibiting a mitotic kinesin Eg5 which comprises administering an effective amount of the thiadiazoline derivative or a pharmacologically acceptable salt thereof according to claim 13.

27.-28. (Canceled)